

Office Action Summary

Application No.

10/699,889

Applicant(s)

TROAN ET AL.

Examiner

ANISH SIKRI

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 29-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action replaces the office action mailed on 4-17-08. That action was improperly made final.

Claims 22-28 are cancelled

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-21 are rejected under 35 U.S.C. 101 as it relates to non-statutory subject matter. Claim 15 states a computer readable medium having stored thereon sequences of instructions for routing packets by Internet Protocol (IP) based router. Support for the medium can be seen in the specification of the application (Page 9, 2nd paragraph) stating "or propagated via a computer readable medium (e.g. transmission wire, an optical fiber, a wireless transmission medium utilizing an electromagnetic carrier wave, etc). Support for computer readable medium which states the use of electromagnetic wave is non-statutory subject matter.

Claims 16-21 are rejected under 35 U.S.C 101 as they are dependent upon Claim 15.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 8-11, 15-18, 29-32 are rejected under 35 U.S.C 103(a) as being unpatentable over Marimuthu et al (US Pub 2005/0021752), in view of Abir (US Pub 2003/0126252).

Consider Claim 1, Marimuthu et al discloses an Internet Protocol (IP) based router (Marimuthu et al, [0002]), a declaration command stored in a configuration file stored in the router and that specifies an address prefix identifier and at least one of an address prefix value associated with the address prefix identifier or a source for the address prefix value (Marimuthu et al, [0006]), the executing of the declaration command further including storing in the router the address prefix value into a prescribed storage location (Marimuthu et al, [0033]) that is assigned to the address prefix identifier (Marimuthu et al, [0006]-[0007], [0009]); parsing, by the router, a router command stored within the configuration file of the router and that specifies the address prefix identifier (Marimuthu et al, [0006]-[0007], [0009]); retrieving by the router the address prefix value for the address prefix identifier from the prescribed storage location assigned to the address prefix identifier (Marimuthu et al, [0006]-[0007], [0009]); and executing the router command within the router based on applying the address prefix value retrieved from the prescribed storage location as the operand in the router command (Marimuthu et al, [0006]-[0007], [0009]).

Marimuthu et al discloses on how an IP router parses its configuration ACL files which contain address prefix values, and the configuration ACL files are stored in the memory of the router (Marimuthu et al, [0006]-[0007], [0009]).

But Marimuthu et al fails to disclose the address prefix identifier a non-numeric representation of an address prefix.

Nonetheless, Abir discloses the address prefix identifier a non-numeric representation of an address prefix (Abir, [0005]-[0006]). Abir discloses on how address prefix are configured to their non-numeric values.

It would have been obvious to a person skilled in the art at the time of the invention to combine the use of logical domain names as non-numeric representation of address prefixes, taught by Abir, in the system of Marimuthu et al, to be incorporated into the router configuration ACL files, which are executed by the router command for network routing purposes.

Consider Claim 2, Marimuthu et al in view of Abir discloses method of claim 1, wherein the executing of the declaration command further includes :
sending an address prefix request to a prefix delegation requesting client in the router for retrieval of the address prefix value in response to determining the source specifies (Abir, [0005]-[0006]) prefix delegation (Marimuthu et al, [0006]-[0007], [0009]);
Marimuthu et al discloses on how the router obtains the prefix value from the ACL lists, which in turn have non-numeric values which are obtained by the Domain server, taught by Abir

Abir does disclose on how sending by the prefix delegation requesting client a prefix request according to a prescribed protocol to an authoritative source in response to the address prefix request; and receiving, according to the prescribed protocol, the address prefix value for use by the router via an IP link from the authoritative source (Abir, [0005]), the authoritative source authorized to assign the address prefix value to the router (Abir, [0005]-[0007]).

Therefore, it would have been obvious to a person skilled in the art, to make use of authoritative source (Domain Name Server), taught by Abir, for requesting prefix values from an authoritative source, in the system of Marimuthu et al for the purpose of reliable communication.

Consider Claim 3, it has similar limitations as Claim 2. Therefore it is rejected under the same rational as Claim 2.

Consider Claim 4, it has similar limitations as Claim 1. Therefore it is rejected under the same rational as Claim 1.

Consider Claim 8, it has similar limitations as Claim 1. Therefore it is rejected under the same rational as Claim 1.

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Consider Claim 9, it has similar limitations as Claim 2. Therefore it is rejected under the same rational as Claim 2.

Consider Claim 10, it has similar limitations as Claim 3. Therefore it is rejected under the same rational as Claim 3.

Consider Claim 11, it has similar limitations as Claim 4. Therefore it is rejected under the same rational as Claim 4.

Consider Claim 15, it has similar limitations as Claim 1. Therefore it is rejected under the same rational as Claim 1.

Consider Claim 16, it has similar limitations as Claim 2. Therefore it is rejected under the same rational as Claim 2.

Consider Claim 17, it has similar limitations as Claim 3. Therefore it is rejected under the same rational as Claim 3.

Consider Claim 18, it has similar limitations as Claim 4. Therefore it is rejected under the same rational as Claim 4.

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Consider Claim 29, it has similar limitations as Claim 1. Therefore it is rejected under the same rational as Claim 1.

Consider Claim 30, it has similar limitations as Claim 2. Therefore it is rejected under the same rational as Claim 2.

Consider Claim 31, it has similar limitations as Claim 3. Therefore it is rejected under the same rational as Claim 3.

Consider Claim 32, it has similar limitations as Claim 4. Therefore it is rejected under the same rational as Claim 4.

Claims 5-6, 12-13, 19-20, 33-34 are rejected under 35 U.S.C 103(a) as being unpatentable over Marimuthu et al (US Pub 2005/0021752), in view of Abir (US Pub 2003/0126252), and further in view of Schmidt et al (US Pat 7328266)

Consider Claim 5, Marimuthu et al-Abir discloses the method of Claim 4 wherein the executing step includes executing the router command for each of the address prefix value (Marimuthu et al, [0006]-[0007], [0009])

But Marimuthu et al-Abir does not disclose and the new address prefix value, based on the executing step being performed before the specified expiration event.

But Schmidt et al discloses the new address prefix value, based on the executing step being performed before the specified expiration event (Schmidt et al, Col 9 Lines 37-65). Schmidt shows on how new IP addresses are checked within the DHCP table pool of IP address, and the list gets updated as how the IP addresses get expired (Schmidt et al, Col 9 Lines 37-65). Therefore it would have been obvious to person skilled in the art at the time of the invention to incorporate the use of DHCP, taught by Schmidt et al, in the system of Marimuthu et al-Abir for the purpose of updating the configuration files relating to updated prefixes obtained from the DHCP.

Consider Claim 6, it has similar limitations as Claim 5. Therefore it is rejected under the same rational as Claim 5.

Consider Claim 12, it has similar limitations as Claim 5. Therefore it is rejected under the same rational as Claim 5.

Consider Claim 13, it has similar limitations as Claim 6. Therefore it is rejected under the same rational as Claim 6.

Consider Claim 19, it has similar limitations as Claim 5. Therefore it is rejected under the same rational as Claim 5.

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Consider Claim 20, it has similar limitations as Claim 6. Therefore it is rejected under the same rational as Claim 6.

Consider Claim 33, it has similar limitations as Claim 5. Therefore it is rejected under the same rational as Claim 5.

Consider Claim 34, it has similar limitations as Claim 6. Therefore it is rejected under the same rational as Claim 6.

Claims 7, 14, 21, 35 are rejected under 35 U.S.C 103(a) as being unpatentable over Marimuthu et al (US Pub 2005/0021752), in view of Abir (US Pub 2003/0126252), and in further in view of Tariq et al (US Pub 2004/0088544)

Consider Claim 7, Marimuthu et al-Abir fails to disclose the method of claim 1, wherein the executing step includes: detecting within the router command an address prefix mask and an address suffix for specifying a router interface; and generating an IP address for the router interface based on applying the address prefix mask to the address prefix value and appending the address suffix

Nonetheless, Tariq et al discloses address prefix mask and an address suffix for specifying a router interface; and generating an IP address for the router interface based on applying the address prefix mask to the address prefix value and appending

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the address suffix (Tariq et al, [0004]-[0005], [0041]). Tariq clearly shows on how the IP addresses are created based on applying the prefix and suffix values. It would have been obvious to a person skilled in the art at the time of the invention, to incorporate the IP address creation based on values stored in the router or obtained via DHCP, taught by Tariq et al, in the system of Marimuthu et al-Abir for the purpose of assigning IP address to the router.

Consider Claim 14, it has similar limitations as Claim 7. Therefore it is rejected under the same rational as Claim 7.

Consider Claim 21, it has similar limitations as Claim 7. Therefore it is rejected under the same rational as Claim 7.

Consider Claim 35, it has similar limitations as Claim 7. Therefore it is rejected under the same rational as Claim 7.

Response to Arguments

Applicant's arguments with respect to claim 1-21, 29-35 have been considered but are moot in view of the new ground(s) of rejection

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH SIKRI whose telephone number is 5712701783. The examiner can normally be reached on 8am - 5pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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a.s.

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